

GECSE

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10/2/91

Mr. Phil Millam  
Superfund Branch Chief  
Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
Seattle, WA 98101

RE: General Electric (GE)/Spokane NPL Site

Dear Mr. Millam:

As you are aware, the Washington Department of Ecology (Ecology) is lead agency for cleanup activities of the GE/Spokane NPL site (per EPA/Ecology Superfund Memorandum of Agreement). As lead agency, Ecology assumed responsibility for all aspects of the remedial investigation, feasibility study, remedial design, remedial actions and community relations at the site.

Work on the site has progressed under an Agreed Order (No. DE 90-05) issued pursuant to the Model Toxics Control Act (MTCA). To date, remedial investigations (RIs) for both soil and ground water, along with a baseline risk assessment, have been received. The soils investigation has been accepted as final, subject to public review. Submittal of the feasibility study is expected within the month.

Interim actions have also been conducted at the site. These actions include excavation of near surface contaminated soils followed up by covering the site with up to two (2) feet of soil. The remaining on-site contaminated soil is found in two old dry wells which extend from the base of the placed surface cover to the water table.

Early on in the process, in-situ vitrification was identified as a potentially promising technology for remediating the soil contamination on site. The Agreed Order called for a demonstration of in-situ vitrification (ISV) technology pursuant to a TSCA permit application and test plan, filed by Geosafe Corporation on behalf of General Electric. The plan called for construction of a test cell into which soils containing low level of PCB contamination excavated during interim action activities would be placed. In addition, TSCA required importation of additional PCB's to "spike" some soils to demonstrate the ability of the technology to remediate high concentrations of materials. Two drums of PCB were imported, and mixed with soils in specific locations in one cell. The spiked layers are located approximately 15 feet below ground surface, in 18 inch layers, at least 40 feet above the water table in the area.

As with nearly all new technologies, problems have been encountered in implementation. Geosafe experienced a failure at their site near Richland, WA, and on that basis, have delayed mobilization to Spokane until such time as they feel comfortable implementing the process. Thus, the constructed test cell remains, awaiting treatment.

It is Ecology's position that the current threat to human health and the environment from the test cell is low. This position is based on an analysis of possible contaminate pathways including air, direct contact and ground water. Volatilization to the air of PCB's is unlikely, as they are buried 15

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feet below the ground surface. Direct contact is limited by the depth of the contaminated soils and the fact that the test cell is within a guarded and fenced area. Access is monitored 24 hours a day.

The remaining possible threat is to ground water. Data to date show that on-site soils have a high affinity for PCB's suggesting that, in the absence of solvents, significant migration of PCB's in the test cell to the water table is highly unlikely. The test cell PCB's constitute a minimal threat to ground water given the substantial thickness of the vadose zone and the high absorption capabilities of the soil for PCB's.

Ecology is taking responsibility under the Agreed Order to ensure that the test cells, and the contained PCB's, remain regulated. Our position is that the test cells constitute a well defined zone of contaminated soil within the perimeter of the site subject to regulation consistent with MTCA.

Under MTCA, Ecology intends to negotiate a consent decree for final cleanup of the site, including remediation of all contaminated soils. Should ISV be chosen as the preferred alternative it must be considered unproven technology. Therefore, it would be both prudent and consistent with the regulation to require beforehand an alternative technology for remedial action should ISV be deemed unworkable. The PLP has expressed interest in this kind of "either/or" approach, simply because it provides them with greater cost predictive information. If ISV proceeds, Ecology will require confirmation sampling to ensure that the PCB's are destroyed consistent with both MTCA and all ARAR's. These ARAR's include Chapter 173-303 WAC State Dangerous Waste regulations, which regulate PCB's to 1 ppm, well below the 50 ppm threshold of TSCA. Destruction efficiency must meet the TSCA requirement of 99.99999%.

Monitoring wells on site and off site have been sampled on a quarterly basis for the past year by Ecology and by GE. Any delay in implementation of the cleanup action plan, such as waiting for ISV demonstration, will require demonstration monitoring, and perhaps immediate active treatment of site ground water. The ISV cell would be within the influence area of any monitoring or active ground water treatment system.

In summary, it is Ecology's position that the presence of PCB's within the ISV test cell constitute a minimal threat to human health and the environment. Both site characteristics and in-place institutional controls exist to minimize this risk. While the risks involved are small, the benefits to be gained from successful demonstration of ISV are high. Ecology encourages EPA to continue its policy of supporting innovative technologies. We are certain EPA will continue to acknowledge their obligations under the State/EPA agreement. In turn, Ecology intend to vigorously pursue the remediation at this site.

If you have any questions please feel free to contact me at (509) 456-7693.

Sincerely,

Flora J. Goldstein  
Section Manager  
TOXICS CLEANUP PROGRAM

cc: CAROL FLESKE  
GUY GREGORY  
BOB KEVIT, WOO